

**DECLARATION**

We, Garo Derderian and Vishnu K. Agarwal, declare that: (1) our respective citizenships and mailing addresses are indicated below; (2) we have reviewed and understand the contents of the specification identified below, including the claims, as amended by any amendment specifically referred to herein, (3) we believe that we are the original, first, and joint inventors of the subject matter in

**METHODS FOR FORMING ROUGH RUTHENIUM CONTAINING LAYERS AND  
STRUCTURES/METHODS USING SAME**

Filed: Herewith

Serial No.: Unassigned

described and claimed therein and for which a patent is sought; and (4) we hereby acknowledge our duty to disclose to the Patent and Trademark Office all information known to us to be material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56.\*

The undersigned declare further that all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Wherefore, we pray that Letters Patent be granted to us for the invention described and claimed in the specification identified above and we hereby subscribe our names to the foregoing specification and claims, Declaration and Power of Attorney, on the date indicated below.

Name: Garo Derderian Date: 5/18/00  
Citizenship: United States of America  
Address: 6184 South Schooner Place, Boise, Idaho 83716

Name: Vishnu K. Agarwal Date: 5/18/00  
Citizenship: India  
Address: 2382 East Red Cedar Lane, #A303, Boise, Idaho 83716

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There\* is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) Prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
  - (i) Opposing an argument of unpatentability relied on by the Office, or
  - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

\*Title 37, Code of Federal Regulations, §1.56 is reproduced on the attached page.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Derderian et al. ) Group Art Unit: Unknown  
Serial No.: Unassigned ) Examiner: Unknown  
Filed: Herewith )  
For: METHODS FOR FORMING ROUGH RUTHENIUM CONTAINING LAYERS AND  
STRUCTURES/METHODS USING SAME

ELECTION UNDER 37 C.F.R. §§3.71 AND 3.73 AND POWER OF ATTORNEY

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

The undersigned, being Assignee of the entire interest in the above-identified application by virtue of an Assignment recorded in the United States Patent and Trademark Office as set forth below or filed herewith, hereby elects, under 37 C.F.R. §3.71, to prosecute the application to the exclusion of the inventor(s).

The Assignee hereby revokes any previous Powers of Attorney and appoints: Ann M. Mueting (Reg. No. 33,977); Kevin W. Raasch (Reg. No. 35,651); Mark J. Gebhardt (Reg. No. 35,518); Victoria A. Sandberg (Reg. No. 41,287); David L. Provence (Reg. No. 43,022); Matthew W. Adams (Reg. No. 43,459); Loren D. Albin (Reg. No. 37,763); Michael L. Lynch (Reg. No 30,871); Lia M. Pappas (Reg. No. 34,095); W. Eric Webostad (Reg. No. 35,406); Walter M. Fields (Reg. No. 37,130); Charles B. Brantley, II (Reg. No. 38,086); Susan B. Collier (Reg. No. 34, 566); Kevin D. Martin (Reg. No. 37,882); and David J. Paul (Reg. No. 34,692)

as its attorney or agent (with full powers of appointment, substitution, and revocation) to prosecute the application, and any division, continuation, continuation-in-part, reexamination, or reissue thereof, to make alterations and amendments therein, and to transact all business in the Patent and Trademark Office in connection therewith, and to receive any Letters Patent.

Pursuant to 37 C.F.R. §3.73, the undersigned certifies that the evidentiary documents have been reviewed, specifically the Assignment to Micron Technology, Inc. referenced below, and certifies that to the best of my knowledge and belief, title remains in the name of the Assignee.

Please direct all communications as follows:

Attention: Mark J. Gebhardt  
Mueting, Raasch & Gebhardt, P.A.  
P.O. Box 581415  
Minneapolis, MN 55458-1415  
Telephone No. (612) 305-1216

ASSIGNEE: Micron Technology, Inc.

Date: My 30, 2000

By:   
Name: Michael L. Lynch  
Title: Chief Patent Counsel

ASSIGNMENT:

X Concurrently filed herewith for recording, a copy of which is attached hereto

## ASSIGNMENT

Whereas We, Garo Derderian and Vishnu K. Agarwal, with residences and citizenships as indicated below; have made an invention in

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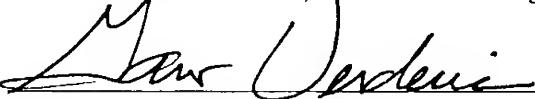
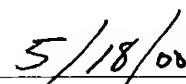
and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto Micron Technology, Inc. ("Company"), a corporation of Boise, Idaho, having its principal office at 8000 South Federal Way, Boise, Idaho 83707, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to Micron Technology, Inc. as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

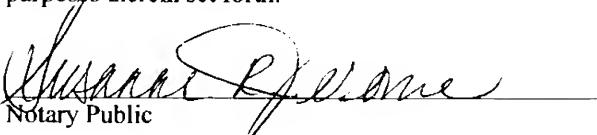



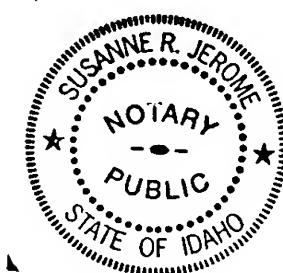
Date

Name: Garo Derderian  
 Citizenship: United States of America  
 Address: 6184 South Schooner Place, Boise, Idaho 83716

STATE OF IDAHO )  
 ) ss.  
 COUNTY OF ADA )

On this 18 day of May <sup>2000</sup> before me personally appeared Garo Derderian to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

  
 Notary Public



Assignment  
Serial No. Unassigned  
Filed: Herewith  
For: METHODS FOR FORMING ROUGH RUTHENIUM CONTAINING LAYERS AND STRUCTURES/METHODS USING SAME

Page 2 of 2

  
Name: Vishnu K. Agarwal  
Citizenship: India  
Address: 2382 East Red Cedar Lane, #A303, Boise, Idaho 83716

Date

5/18/00

STATE OF IDAHO )  
COUNTY OF ADA ) ss.

On this 18 day of May <sup>2000</sup> before me personally appeared Vishnu K. Agarwal to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

  
Notary Public

